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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Rafael Alos

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EXAMINER

FERRIS, DERRICK W

ART UNIT

PAPER NUMBER

2663

13

DATE MAILED: 05/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/600,742

Applicant(s)

ALOS, RAFAEL

Examiner

Derrick W. Ferris

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. **Claims 1-15** as amended are still in consideration for this application. Applicant has amended claims **1-5**. Applicant has added claims 6-15.
2. Applicant has failed to provide corrections to the drawings as requested by the examiner, see Office action filed 03/15/04.
3. Examiner does **not withdraw** the obviousness rejection to *Belpaire* in view of *Svobodova* for Office action filed 03/15/04. In addressing applicant's arguments in the response filed 05/03/04, at issue appears to be the same items presented in the 112-first paragraph rejections below. The examiner would like to thank applicant for taking the time to clarify applicant's invention. *Belpaire* teaches converting an SMTP protocol into an SMS protocol. This is accomplished by a filtering means which breaks up the SMTP protocol (i.e., IP packet) into a header portion (i.e., signalling field) and a data portion. Processing means P, D and A further processes the data portion. E means then embeds the header info translated by DTM and the data blocks processed by P, D, and A means to form SMS packet(s). This process is described e.g., from column 6, line 10 – column 7, line 38. In particular, the processing means replaces some information in the data packet with "short codes" (such as image data since this information does not fit into an SMS packet) and segments the data portion into blocks so that the blocks would fit into an SMS payload. In particular, the decomposing means D (see column 7, lines 1-5) decomposes the data portion in order to avoid the severe length constraint (see e.g., column 2, lines 1-8 and column 2, lines 39-43). Thus if the data portion is within the "severe length constraint" these further processing means are not needed. The premise of applicant's

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specification is that the INTERNET data portion 18 is no larger than e.g., 140 bytes (i.e., the size of an SMS payload 16) and thus is directly mapped. In fact applicant doesn't disclose the contents of data portion 18 at all only the size. *Belpaire* teaches that the size of the data portion is variable based on the context of the payload (i.e., the size *could* exceed e.g., 140 bytes). Thus *Belpaire* further teaches processing means needed to reduce the size of data portion to e.g., 140 bytes (either by using short codes, decomposing, or both). Thus examiner notes that after processing the size of the data portions are the same of the Internet packet and the SMS packet. As for transmitting data in either direction, this is taught by *Belpaire*, see e.g., column 3, lines 50-55. Examiner would agree that the content would not be the same in both directions but this is not claimed nor supported in applicant's specification.

4. Examiner **withdraws** the obviousness rejection to *Anderson* in view of *Svobodova* for Office action filed 03/15/04. The examiner has withdrawn the rejection since upon further reconsideration, it may not be clear whether the header portion is encapsulated or translated since *Anderson* only discloses the process corresponds to "conventional methods" (i.e., the reference does not mention what those "conventional methods" are), see column 7, lines 55-60.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

6. **Claims 3 and 6-10** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with

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which it is most nearly connected, to make and/or use the invention. In particular the claim limitation at issue is claim 3, lines 2-5 and claim 6, lines 8-11. In particular, the issue is whether both fields in a packet are the same size and configuration. Specifically (in view of applicant's figure 3) whether signaling fields 17 and 19 are the same size. Applicant teaches that data fields 16 and 18 are the same size, see page 6, lines 17-22. Applicant however is silent or deficient as to whether signaling fields 17 and 19 are the same size. Instead applicant recites "In the same way, the signaling data of the field 19 can be accommodated in the field 17". This does not present enough information as to whether they are the same size especially considering that applicant further appears to teach that combining mapping and extending the address structure (merging or adding the signaling of the packets of one domain to another). In fact, applicant teaches away from the same size by disclosing that the INTERNET signaling can be kept wholly or partially as it is, with a possible adaptation of form, by *extending* the SMS or USSD signaling protocol by new IE (Information Element) code words representing the INTERNET signaling. In addition, applicant also discloses that code words representing the signalling of the INTERNET network are *added to* the signaling of the packet of the GSM network, see page 5, lines 15-22. Also see applicant's specification at page 6, lines 9-14 and originally filed claims 2 and 3. At second issue is that applicant claims that signaling fields 17 and 19 and data fields 16 and 18 are the same "configuration". Examiner respectfully disagrees although it may not be clear what applicant means by "configuration". In particular, nowhere in applicant's specification are the contents for the data fields 16 and 18 disclosed. Limited disclosure is provided about the signaling fields 17 and 19 but it is not clear from this disclosure on whether the configurations are the same. Examiner notes the configurations cannot be the same if

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mapping takes place as disclosed by applicant. Thus with respect to the enablement rejection, examiner notes undue experimentation with respect to both making the signaling fields 17 and 19 the same length and making the configuration the same between the signaling fields 17 and 19 and data portions 16 and 18. Claims 7-10 stand rejection for depending on claim 6.

In order to expedite prosecution by making the further obviousness rejection(s) below, the examiner assumes that it would have been obvious to one skilled in the art prior to applicant's invention to make the signaling fields the same size and to use the same configuration information for the signaling fields and data portions.

7. **Claims 3 and 6-11** are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. See the enablement rejection above with respect to issues with claim 6. In particular, newly added subject matter is that the signalling fields 17 and 19 are the same length and that the configurations for the signaling fields 17 and 19 and data portions 16 and 18 are the same. As pointed about above, examiner notes neither is possible since applicant's disclosure teaches away from both limitations. Claims 7-10 stand rejection for depending on claim 6.

In order to expedite prosecution by making the further obviousness rejection(s) below, the examiner assumes that it would have been obvious to one skilled in the art prior to applicant's invention to make the signaling fields the same size and to use the same configuration information for the signaling fields and data portions.

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. **Claims 1-15** are rejected under 35 U.S.C. 103(a) as being unpatentable over EP000777394A1 to *Belpaire* in view of “Heterogeneity and OSI” to *Svobodova et al.* (“*Svobodova*”)

As to **claim 1**, *Belpaire* discloses a method and apparatus for electronic mail transmission as short messages towards a mobile radio network. In particular, note figure 1 and column 2, lines 1-8 and 39-42. With respect to the limitations, a first data transmission device is shown as MT1 or MT2 in figure 1. A first network for transmission of cellular packets is shown as GSMN (e.g., see column 1, lines 51-59) where short messages are cellular packets. A second transmission device is shown as terminal T1 or T2. A second network for transmission of packets is shown as the Internet. With respect to applicant’s vague figure 3, *Belpaire* further teaches a data portion (i.e., field of useful data) traversing a bottom portion of a mail service gateway (i.e., F, P, D, A, and E) and a header portion (i.e., signaling field) traversing a top portion of a mail service gateway (i.e., F, DTM, E). In particular, removing and adding a new destination address accomplishes routing (e.g., see column 7, lines 20-32).

Belpaire may be silent or deficient to the further limitation “the two packet fields of the second network are transported on the first network respectively into the two

counter part packet fields of the first network”. In particular, *Belpaire* discloses the following:

“The embedded means E additionally embeds the new destination identifier, the data blocks and their related extensions data blocks in short messages and supplies these short messages to the network for mobile communications GSMN via the short message port” [column 7, lines 33-44].

In particular, at issue is the term “embeds” with respect to context of the disclosure where examiner notes the term is either not clearly defined or reads on applicant’s invention using a reasonable but broad interpretation of the recited claimed subject matter. In relation to a Mail Service Gateway (MSG) shown in figure 1 of *Belpaire* a filtering means F filters a mail message into head info used for routing, and data info or “naked info”. The head info is sent to the destination transfer means (DTM) and the remainder of the data information is sent to the processing means (e.g., see column 6, lines 10-16). Thus with respect to the term “embeds”, *Belpaire* discloses placing the new destination identifier and the modified data info or “naked info” into the short message. In other words, not mentioned in the above-passage (or in the cited references) is “embedding” the original address (i.e., signaling portion) and useful data into the data field of the short message. Thus with respect to applicant’s vague figure 3, *Belpaire* meets the limitation since the counter-parts of both the header and the data fields are mapped/embedded into a short message (i.e., from the teachings of the reference mapped and embedded are analogous). In other words, since *Belpaire* does not use the original address, examiner notes that the data field is left fully available. However, assuming the reference is

unclear with respect to the context of “embeds” (i.e., the reference is instead completely silent to the type of address conversion) then the examiner also notes an obviousness rejection as follows.

Svobodova teaches the further limitation “the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network” by teachings various forms of interdomain addressing which include address mapping for an OSI standard protocol such as IP (e.g., see Section B on page 75) in reference to mapping.

Examiner notes that it would have been obvious to one skilled in the art prior to applicant’s invention to include the limitation “the two packet fields of the second network are transported on the first network respectively into the two counter part packet fields of the first network”. In particular, *Svobodova* modifies *Belpaire* by disclosing a direct mapping of a signaling field as is well known in the art (and not to be confused with address encapsulation also mentioned in Section 2 of *Svobodova* which is distinctly different from “embedding”). The suggestion or motivation for doing so would have been to hide the originating networks address as well as to offer uniform interdomain addressing (i.e., “unified use” in reference to applicant’s specification page 3, second paragraph from bottom). In particular, *Svobodova* cures the above-cited deficiency by providing a motivation found at the right-hand column on page 75. In addition, mapping addresses in a field as is known in the art and taught by *Svobodova* further provides a functional merger of two networks for unified use which has the advantage over the

general encapsulation of using the signaling field of the first network for signaling of both networks, thus leaving the data field fully available.

As to **claim 2**, see e.g., column 7, lines 20-32 of *Belpaire*.

As to **claim 3**, see related extension data at column 7, lines 33-39 of *Belpaire*.

As to **claim 4**, see e.g., column 7, lines 20-32 where SMS packets are used for the GSM network (e.g., see column 4, lines 19-34) of *Belpaire*.

As to **claim 5**, see figure 1 of *Belpaire* and the rejection for claim 1 where the information is extracted during the filtering F section.

As to **claim 6**, see similar rejection to claim 1.

As to **claim 7**, see similar rejection to claim 2.

As to **claim 8**, see similar rejection to claim 3.

As to **claim 9**, see similar rejection to claim 4.

As to **claim 10**, see similar rejection to claim 5.

As to **claim 11**, see similar rejection to claim 1.

As to **claim 12**, see similar rejection to claim 2.

As to **claim 13**, see similar rejection to claim 3.

As to **claim 14**, see similar rejection to claim 4.

As to **claim 15**, see similar rejection to claim 5.

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Derrick W. Ferris whose telephone number is (703) 305-4225. The examiner can normally be reached on M-F 9 A.M. - 4:30 P.M. E.S.T.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on (703) 308-5340. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


DWF

Derrick W. Ferris
Examiner
Art Unit 2663


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